

The Ecologist Digest

Nuclear Power: Bombs, Accidents, and the Arms Race

Three Mile Island was inches from disaster, Harold Jackson, *The Guardian*, 23rd July 1982.

A meltdown of the reactor core was only narrowly avoided in the accident at Three Mile Island three years ago. Experts who have finally achieved the first television inspection of the fuel rods — damaged when their cooling water was wrongly shut off — found there had been a far greater danger than previously realised. The head of the inspection group, Mr. William Hamilton, said that the two-hour examination has revealed that "the uranium oxide fuel had melted". For this to have happened, the temperature must have reached at least 1,250 degrees Fahrenheit, 32 per cent higher than previously assumed — verging on the point at which the highly radioactive molten mass could have destroyed its container and anything else in its path. In the official report on the accident, the section giving a technical assessment of the core damage estimated the peak temperature during the accident as 3,900 degrees Fahrenheit. This was enough to melt the protective metal cladding of the fuel rods, made of zirconium, and the report estimated that 90 per cent of them had probably ruptured. Of the fuel, however, the report could only comment: "There was general agreement that some uranium oxide fuel was liquefied but no general agreement on the extent of the liquefaction." It said that instrument readings suggested that "226 minutes after the start of the accident, a section of the core suddenly slumped downward as a consequence of earlier damage." The latest camera inspection, according to Mr. Hamilton, has disclosed that "fuel elements were badly damaged, and the rubble was badly broken up into small particles. Some of it appeared to be congealed together. The control rods were damaged also. The centre of the core was very badly damaged." The initial technical assessment surmised that conditions within the reactor might have led some of the fuel rods to melt below the 5,150 degrees Fahrenheit normally required. But the experts acknowledged in 1979 that there was "no general agreement on the extent of the liquefaction because of the complexity of all the physical relationships involved." They said the answer would have to await "actual inspection of the reactor fuel itself."

Nuclear power 'will not lead to cheap electricity', Rod Chapman, *The Guardian*, 28th June 1982.

The Central Electricity Generating Board has been misleading and systematically optimistic about the economics of nuclear power, says a study published by the industry's consumers council. The report, *Nuclear Power and the Economic Interests of Consumers*, concludes that nuclear power seems unlikely to cheapen electricity prices significantly by itself and argues that the cost advantages over coal may be marginal. It claims that calculations show that many stations turn out to have more expensive sources of energy than coal for most of their lifetime. The study also criticises the board's sums on future investment. If certain target figures are changed to a modest degree, it says, the general case for ordering advanced gas-cooled reactors (AGRs) ahead of need collapses. A risk minimising strategy would be to order a mixture of nuclear and coal plant to generate electricity. The report takes the Government to task for postponing the choice between AGRs and PWRs, the water-cooled reactors. It is unlikely that the two systems will ever be tested competitively, but consumers will have to bear the cost until a decision is reached. Internationally, according to the report, it seems likely that UK reactor costs are relatively high.

US nuclear missile explodes on flight, Harold Jackson, *The Guardian*, 23rd July 1982.

A Perishing 11 medium range missile — the controversial nuclear weapon due to start service in Western Europe at the end of 1983 — exploded during its first test flight from Cape Canaveral. A spokesman at Patrick Air Force Base said the missile had "self-destructed during its first stage burn, about 30 seconds after take-off. There was a flash and a cloud of smoke". He said that most of the debris had fallen into the Atlantic and no one had been hurt. The episode will embarrass the Pentagon, which has issued several denials of reported problems with the missile.

Nuclear waste rail line 'a target', Joe Joyce, *The Guardian*, 7th July 1982.

A railway line carrying nuclear waste to Windscale was described as a target on a tape recording "hit list" which included more than 25 prominent

Britons, found at a London flat allegedly occupied by Gerald Tuite, the IRA bomber. The information was included on one of four cassettes found in the flat in 1979 and played in the Special Criminal Court in Dublin during Tuite's trial. The reference to Windscale was described as "information received". The transportation of nuclear waste from two points in northern England and the Scottish border involved "target railway tracks to Windscale from Whitehaven and Barrow-in-Furness." It added that the train was usually two cars, travelling on a single railway track especially laid for the purpose. The tape also mentioned that "safe nuclear waste" was transported from a port in west Wales.

Doubts remain on US reactors, Pearce Wright, *The Times*, 16th July 1982.

More detailed engineering assessments of the safety of the American type of pressurized water reactors (PWR) are needed before a licence can be granted to the Central Electricity Generating Board to build the first such reactor in Britain, as planned, at Sizewell in Suffolk. The safety issues that still need to be resolved are described in a report published by the Nuclear Installations Inspectorate, the Government's licensing agency. Mr. R.D. Anthony, the chief inspector, believes a satisfactory design to meet the safety standards in Britain is achievable. However, he adds, there are a number of safety issues remaining where more work needs to be done before the inspectorate is satisfied that an acceptable design and safety case has been put forward. Only then would licensing and construction be allowed to proceed. These areas of concern listed in the report include the case made against hazards such as fire, aircraft crash or earthquake, the behaviour of the fuel cladding in certain faults; the provision made for dealing with flaws arising in the pressure tubes of the steam generator; and the behaviour of the plant after possible failure of the control mechanism designed to move the moderating rods into position to shut down the reactor. In a number of other important areas, such as the integrity of the pressure vessel containing the nuclear core against catastrophic rupture, and of the micro-processor technology for the alarm monitors for reactor protection, the inspectorate says though it is satisfied, in principle, that a safety case can be made, more work has to be done to show an acceptable proof of evidence.

New trial after nuclear test 'lies', Micheal Hamlyn, *The Times*, 6th August 1982.

A judge in Utah said that he had "naively" believed lying government officials 26 years ago and now granted a new trial to farmers who claim that 4,400 sheep were killed by nuclear fallout. Judge Sherman Christiansen ruled in 1956 that the Government was not to blame when the sheep died shortly after two above-ground nuclear tests were carried out in Nevada. He ruled that the fallout probably did cause the deaths but exonerated the Atomic Energy

Commission because it had no prior knowledge of its effects. The Government declared that the sheep died as a result of drought, herd mismanagement and disease, but a congressional hearing in Salt Lake City indicated that the commission, which is now part of the Energy Department withheld and suppressed evidence. "The circumstances . . . clearly and convincingly demonstrate a species of fraud upon the court for which a remedy must be granted," Judge Christiansen said.

Clash over safety at nuclear plant, Robin McKie, *The Observer*, 11th July 1982.

Anti-nuclear campaigners have claimed to have uncovered important evidence showing that safety features have been cut from the proposed Sizewell nuclear power station to reduce costs. The allegation was vigorously denied by the Central Electricity Generating Board. The claim is based on confidential design plans for an earlier version of the Sizewell plant. Copies of these plans show that a number of significant changes have been made to the original design. The alterations to the plans for Britain's first pressure reactor (PWR) plant include: Scrapping a back-up building housing special emergency equipment; pairing together emergency pump lines, increasing the possibility of common failure and removal of radiation shielding in generator inspection rooms. The Central Electricity Generating Board, which is backing the Sizewell plan, denies that these changes would affect the plant's safety. Design alterations made by the team headed by Walter Marshall now the board's chairman, had been introduced to make better use of existing technology a spokesman said. Safety at Sizewell would be improved because of new features introduced by the Marshall team, according to the spokesman. These include plans to automate inspection procedures and to use a variety of different pumping and cooling systems. However, Friends of the Earth is adamant that the two sets of plans reveal a significant cut in both safety and costs at Sizewell. 'The CEBG maintains they have not cut safety in order to reduce costs,' said its energy campaigner Ms. Renee Chudleigh. 'We now have documentary evidence to show that this is not the case. The earlier design had a number of significant safety improvements which have now been rejected to keep costs down.'

Doctors examine horrors of nuclear war, Andrew Veitch, *The Guardian*, 8th July 1982.

Nuclear war would kill millions of people in the target areas, and millions more in countries not directly involved in the conflict, Sir John Stallworthy told the British Medical Association's annual meeting. Many survivors of the initial blast, fire, and radiation would succumb to injuries for which no effective medical treatment could be provided. Others would perish in widespread epidemics or die of starvation. Sir John, chairman of the BMA's Board of Science, was giving a progress report on the

BMA's investigation into the medical effects of nuclear weapons. "The study is a grim one," said Sir John. "Radioactive contamination could spread over vast areas and effect the biosphere, with resultant serious effects on any surviving life. Breakdown of telecommunications transport and vital services could compound the chaos. Psychological effects on physically undamaged survivors could be considerable." His team is also examining the problems of stockpiling blood, drugs and other medical supplies, and plans which "might contribute to some salvage."

Asbestos

Asbestos denial, *The Guardian*, 23rd July 1982.

Turner and Newall, the asbestos company, has denied suppressing information on the subject of asbestos and health. Dr. John Morris, the former company doctor had said on television that his evidence to the company on the high incidence of asbestos-related disease was never published. He concluded one worker in four was affected, but evidence from Turner and Newall was said to have given a figure of one in 300. The Lancashire-based company said in a statement that none of their companies had "knowingly supplied false information nor has any information been suppressed on the subject of asbestos and health."

Lung damage 'found among asbestos workers', *Angela Singer, The Guardian*, 24th July 1982.

Nearly half of a group of employees medically examined at the Mintex clutch and brake linings factory in Bradford, Yorkshire, had the first detectable signs of lung damage, according to a study by the British Occupational Hygiene Society. Employees at Mintex, who work with asbestos, stopped work for three hours on Wednesday, following a Yorkshire Television documentary on asbestos-related cancer, *Alice: A Fight for Life*. Work was resumed after management assurances on safety. Mintex's parent company, British Belting and Asbestos Ltd., told the Simpson Committee, the Government's advisory body on asbestos, in June 1977: "We have as yet had no cases of asbestos disease in workers who have commenced work from 1952 onwards." Interviewed by Yorkshire Television in 1981, Mr. Ross Hunt, industrial health research officer for British Belting said: "I can tell you that there have been no cases in any employee here that have occurred here since 1953." A study begun in 1977 and completed in 1980 by the BOHS asbestos sub-committee concluded that 46 per cent of the 351 Mintex employees examined displayed one or more signs of adverse effects. This report has still not been published. An interim summary was given to

the Simpson Committee. The symptoms were crackles in breathing, not cleared by coughing; shadow on the pleura (lung lining); shadow on the lung itself and loss of lung function. Mr. Hunt was not available for comment on the findings, but a spokesman at the company's headquarters at Cleckheaton, West Yorkshire, said: "If at any time an examination gives any indication that there is a problem, the individual would be told." The spokesman confirmed that employees received a thorough medical examination before being appointed and had to be passed as fit. The BOHS study examined people who had started work with asbestos after 1951 and had been exposed to asbestos for at least 10 years. The study says that the data from the Mintex factory "must be regarded as biased because the medical care policy was to remove persons from exposure whenever clinical examination indicated early signs of lung function abnormality. These persons were lost to the study, yet some of them may have developed the signs as a result of their exposure to asbestos." This study was set up to review the maximum recommended dust level in the 1969 Asbestos Regulations, based on a report by the BOHS. The level was set at 2 million fibres in the amount of air normally breathed in an hour.

Carpenter's death puts medical advice in doubt, *Angela Singer, The Guardian*, 26th July 1982.

The death of a carpenter who sawed asbestos cement sheets for roofing may lead to the withdrawal of a Department of Health booklet for doctors which says that working with the cement is unlikely to cause disease. The booklet: *Notes on the Diagnosis of Pneumoconiosis*, was published in 1979 and copies were also distributed to Department of Health and Social Security officers for guidance on industrial disease benefit. It says: "There is little risk with the cutting and sawing of asbestos cement products because the fibres are largely captive in the cement." A DHSS spokesman said that Mr. Norman Fowler, the Health Secretary, was considering an urgent appeal to revise the wording from Lord Avebury, a trustee of the Society for the Prevention of Asbestosis and Industrial Diseases (SPAID). Mr. Derrick Porter, a carpenter from Cheshunt, Hertfordshire, died last September, aged 56, of mesothelioma, cancer of the lung lining, the only known cause of which is asbestos. "Medical officers are looking at the evidence," the spokesman said. "There are aware of Derrick Porter's case and a decision is being taken on whether to revise the text. A reply is being prepared for Lord Avebury." When a pneumoconiosis panel examined the dead man's lungs under an electron microscope, it found more than 479 million fibres of white asbestos in just one gram of dried lung tissue. He had sawed asbestos cement sheets for roofs for 12 years, from 1948 to 1960. The cement is the most widely used asbestos product. The industry estimates that it accounts for up to 50 per cent of its business, but has always given assurances that there is no danger as the

asbestos fibres are locked in. This has also been the view advanced by the pneumoconiosis unit of the Government's Medical Research Council. A former director of the unit, Dr. Joun Gilson, now an adviser to the asbestos industry's International Association, said recently: "As far as I know this is still the view. The fibres are locked in compared with those in asbestos fabric, where the fibres come off if you rub it — or in comparison with loose or sprayed asbestos. But SPAID has collected increasing evidence that fibres do escape and enter the lung. Mrs. Nancy Tait, the secretary of SPAID, said yesterday that Mr. Porter's case was the first in which the number of fibres had been scientifically recorded and reported to the society by a pneumoconiosis panel.

Health officers warn over asbestos panic, Angela Singer, *The Guardian*, 26th July 1982.

Householders who break up asbestos panels in panic and dump them illegally could cause a cancer risk to themselves and the community, the Institution of Environmental Health Officers has warned. The institution said that following the Yorkshire Television programme *Alice — A Fight for Life*, which showed how asbestos could cause asbestosis and mesothelioma (cancer of the lung lining) local environmental health departments all over the country had been inundated with inquiries from people worried about asbestos in the home. The risks had been underestimated for several years, the institution said, but it was concerned that householders may be panicked into removing and illegally dumping asbestos. The institution's statement adds: "The institution is concerned that many county councils do not have a service for collecting asbestos. One council is advising householders to smash up asbestos sheets and put them into double plastic bags to enable them to collect, as they do not have vehicles large enough to remove intact sheets. This practice is to be deplored." It is calling on the Government to set up a free and effective toxic waste collection service, and also wants ministers to make a public statement on the dangers of asbestos materials, and to advise local authorities and Government departments. It has also been substantiated that mentally handicapped youngsters had worked with asbestos, assembling car gasket, without masks, protective clothing, or special ventilation. They received £2 per week. Young people aged between 16 and 26 at the Elliman Avenue training centre and hostel in Slough, Buckinghamshire, worked on a contract for Cooper Payen, a subsidiary of Turner and Newall. The work was stopped twice by Slough's medical officer of health, Dr. Macdonald Charrett. He stopped it in 1970 and again after it was reintroduced in 1971. He said he had been "a bit cross" when he had to stop the work a second time. Dr. Charrett was asked to intervene by an instructor at the centre, Mrs Peggy Hughes. She said work with asbestos for gaskets had continued — though in a less dusty form — at

least until 1977. Mrs. Hughes said wardens at the hostel had been concerned that trainees came home with their hair full of what looked like dandruff. In 1976 one of the 60 trainees died of throat cancer.

Masks at asbestos firm are of cosmetic value only, Anglea Singer. *The Guardian*, 5th August 1982.

Britain's largest asbestos company, Turner and Newall, confirmed recently that paper masks worn by workers in their Rochdale factory were of cosmetic value only, offering no protection against asbestos dust. Mr. Reginald Sykes, health and safety officer for TBA Industries, owned by Turner and Newall said: "The masks are used right near the weaving looms. It is quite correct that they are not designed for use where the readings of dust levels are high, but dust levels in the factory generally are very low, and within the Government's recommended standard." He said that a few dozen employees out of a total of 800 worked in dustier conditions in the carding room. These workers were issued with approved respirators. The paper masks were not specifically issued, he pointed out, they were just available if people wanted them. Both the company and the Health and Safety Executive said that Turner and Newall were within the law because the respirators are not legally required for dust levels at or beneath, the "one-fibre standard". That is one million fibres per cubic metre of air, or eight million fibres over a working day. A cubic metre of air is the amount breathed by most people in an hour. However medical authorities on asbestos estimate that at least five out of 100 people will die of asbestosis or asbestos cancer, mesothelioma, at the one-fibre level. This is what is now regarded as the conservative estimate of the Cancer Epidemiology and Clinical Trials Unit at Oxford University. The head of the unit, Professor Richard Doll, has stated: "A level of one fibre is too much. I doubt of the (Simpson) report has got its estimates of the effect of this amount correct." The Government's advisory Committee on Asbestos, the Simpson Committee, recommended a one-fibre level when it reported in 1979. None of the 53 Simpson recommendations are yet law, the current hygiene standard is two-fibres, or 16 million over a working day. Added to this, trade union representatives at the Rochdale factory have reported that the two-fibre standard has been breached and have asked for respirators. A minute of the factory's health and safety committee passed to *The Guardian*, says factory air sampling has shown results "significantly and persistently" above two fibres in the Fortex Department. Fortex has been heralded by the company, as a new, safe, wet process, which is dust-free. The response of the management to the request was that the concentrations did not seem to be persistently above two fibres, and that the results could be due to malpractices with the positioning of guards. The management itself told the Simpson Committee that there had been reading of up to six fibres in the 1970s. The same paper masks were used in the

factory at this time and complained of in a lengthy, three-way correspondence between the management, the union, APEX, and Mrs. Nancy Tait, secretary of SPAID — the Society for the Prevention of Asbestosis and Industrial Diseases. Mrs Tait had visited the factory in 1976 and been told by the director and general manager showing her round, Mr. Norman Rhodes, that the masks were "of cosmetic value, but they make some workers feel better." Mrs Tait complained of this to Mr. Roy Grantham, general secretary of APEX who in turn wrote to Mr. Rhodes. Mr. Rhodes's reply was that the mask covered the mouth and nose and, whilst not as efficient as the approved type of respirator, it did offer a fairly high degree of protection. The mask is the 8500 non-toxic particle mask, made by 3M United Kingdom Limited. A warning on the box reads: "This product is not designed for use as protection against asbestos, silica or cotton dust or any other toxic dust, fumes, mists, gases and vapours." A spokeswoman for 3M said the mask was a nuisance dust mask designed for comfort rather than protection. "They are better than nothing but of no use for toxic dust. They will not stop fibres fine enough to get into the lung."

New Asbestos regulations will be 'licence to kill', Angela Singer, *The Guardian*, 6th August 1982.

Regulations expected in the autumn to license contractors whose employees strip asbestos lagging will be ineffective and "a licence to kill," according to the main trade union concerned, unless a strict code of practice is drawn up and enforced. Mr. Frank Earl, National Industrial Officer of the General and Municipal Workers' Union, said that clients and the public would be less vigilant than before the licensing scheme, because they would assume that a licensed firm was safe. In fact, all a company had to do was pay £60 and sign a declaration that the employers had read the safety code. The chances of unscrupulous operators being caught on site in breach of safety procedures was small because of cut-backs in the factory inspectorate. Mr. Earl said that very high standards were needed to work with asbestos and prevent disease, which made thermal insulation work very expensive. It costs £15 million to strip a small power station and £500,000 to strip a council estate. "The way is open to a flood of cut-throat, cowboy operators who could do a cheap job in a few days without HSE inspectors being aware of their operations." The executive had admitted that they could not effectively enforce the law in the thermal insulation industry, Mr Earl said, due to the transient nature of the work, the number of small firms and the itinerant workforce.

'More time to do nothing', Angela Singer, *The Guardian*, 6th August 1982.

The Government's decision to implement immediately new regulations for work with asbestos, instead of waiting for directives from the EEC, is regarded by many campaigners and those working

with the material, more as a move to stop demands for a further inquiry than as a genuine effort towards securing safer working conditions. The Advisory Committee on Asbestos, chaired by Mr Bill Simpson, chairman of the Health and Safety Commission, was appointed in 1976. Not one of its 41 recommendations has yet become law. Ministers have said consistently that the recommendations will be implemented in line with two EEC directives expected in 1985 — one on working conditions, the other on marketing and labelling of asbestos products. The last such reply — from David Waddington, Under-Secretary of State for Employment — was made to Mr. Jack Ashley, the Labour MP for Stoke on Trent, on August 6th 1982. Yet the following day Mr. Waddington said that four of the Simpson recommendations would be put into practice "as soon as possible." The Health and Safety Executive denies that this is the result of pressure after the Yorkshire Television documentary on asbestos, *Alice: A Fight for Life*, on July 20 but the timing of this significant policy change looks more that coincidental. None of the four recommendations is likely to have a momentous effect on the asbestos industry. One is a system of licensing for contractors whose employees strip asbestos lagging. As it stands the licensing system is a formality with no effective policing system to ensure that the companies stick to an agreed code of practice. Moreover, stripping old asbestos lagging is hardly central to the future of the asbestos industry. The licensing system does not cover the tens of thousands of building workers still cutting and fitting asbestos panels and sheets. Nor does it apply to local authorities or nationalised industries such as British Rail. Two of the recommendations are merely confirming, in law, what was already being done by the industry before the Simpson Committee reported — a ban on the use of blue asbestos (crocidolite) and a ban on spraying asbestos. The fourth recommendation, the reduction of dust levels in the factory atmosphere to the "one-fibre standard," is, again said to have been accomplished already — though this is contested. The one fibre standard (one million fibres in the amount of air most people breath in during an hour) is an arbitrary level. It cannot be accurately measured in the factory. The Health and Safety Executive admits an error factor in the counting of fibres of at least 50 per cent. The Yorkshire Television documentary pointed to medical evidence that the incidence of disease on which this calculation is based may be higher than previously thought. Questions were raised in the programme as to whether the Simpson Committee had seen this medical evidence — and disregarded it. Was the inquiry thorough enough? Certainly, this evidence was not reflected in the committee's report, nor was it passed on to the Employment Medical Advisory Service. The evidence itself was in the form of two studies, one by Dr. John Morris, a company doctor at a factory owned by Britain's largest asbestos company, Turner and Newall, another by the British Occupational Hygiene Society. Both pieces of research — done at two

asbestos factories — found the incidence of the disease to be one person in four. The documentary cast incontrovertible doubt on three crucial assumptions made by the Simpson Committee and all previous regulation—makers for asbestos. These are that white and brown asbestos are less deadly than blue; that mesothelioma (asbestos cancer of the lung lining) kills only after a long latency period; and that asbestosis and mesothelioma develop only after high exposure or exposure over a long period. Yet cancer victims shown on the programme had worked only with white asbestos. One mesothelioma victim died, aged 32, having loaded asbestos cement sheets for only two weeks. Another mesothelioma victim was a boy aged 12. A voluntary ban was put on blue asbestos in the mid-1970s — when it amounted to only about 5 per cent of the industry's business. Since 1968, the list of recorded deaths from mesothelioma has shot up from 154 to 428. The Simpson Committee was appointed after the Ombudsman criticised the factory inspectorate for lax conditions at Acre Mill, an asbestos factory owned by Cape in Hebden Bridge, Yorkshire. At least 200 people had contacted asbestosis and mesothelioma. One of them was Alice Jefferson, whose last few weeks of life were filmed by Yorkshire Television. The establishment of a committee which sat for three years, the device of "waiting for EEC directives" gave the Government an extra decade in which to do little, if not nothing. The British Government knew asbestos was a killer in 1906. Production of asbestos world-wide doubled between 1930 and 1976 according to the World Health Organisation and is expected to double again by the end of the century. There is still no compulsory labelling of asbestos products. Asbestos is used in filters for wine and soft drinks, in vinyl floor tiles, in textured paints, as well as all its obvious uses such as in fire protection and panelling. Yet there is not one single use for which asbestos is really necessary. Asbestos is used surreptitiously and needlessly, if the public were given correct information and the choice of alternative materials. Would people really have wanted Alice and others like her to have to die for something as trivial as an oven glove or a pad on an ironing board?

Chemicals, Drugs, Health and Pollution

The great drugs raid, Andrew Veitch, *The Guardian*, 16th July 1982.

The military government of Bangladesh has at a stroke done something that no other developing country — or developed one for that matter — has dared to do: it has enacted, almost in its entirety, the World Health Assembly's resolution on essential drugs. It has drawn up a list of 250 essential drugs, banned 237 products deemed to be harmful, and has

instructed that 1,500 others be discontinued when supplies run out. This draconian act has been interpreted as a massive assault on the multinational companies that dominate the country's drug market. In fact, it should mean that many more Bangladeshis will get the drugs they really need at a price the country can afford. Drugs marked down for removal by the expert committee that formulated the policy include combinations of different antibiotics, combinations of analgesics, multivitamins, cough mixtures, gripe water, products with a high alcohol content, anabolic steroids (which had been given to under-nourished children), products containing strychnine and codeine, and clioquinol (the active constituent of the anti-diarrhoea drug Entero-Vioform, found to cause serious damage to the nervous system). People selling dangerous hospital medicines on the open market will be fined or imprisoned. Multinationals will no longer be allowed to produce low-technology drugs like vitamins — local firms do it instead — and they will not be allowed to compete with locally manufactured products. All this would seem to be entirely in line with the resolution passed at the World Health Assembly in Geneva three months ago. The World Health Organisation described the Bangladesh move as "very good progress." Yet the US which has no little influence on WHO policies — it contributes a quarter of the WHO budget — was less than enthusiastic. The State Department spokesman said: "We would like to delay implementation of this law to allow the Government of Bangladesh and the drug manufacturers to work out their differences. It has been suggested that a review panel be appointed to study the matter." The US drug firms Pfizer and Squibb, dominate the £35-millions a year Bangladesh drug market. Together with British-owned Fisons, Glaxo, and ICI, the French-owned May and Baker, the German firm Hoechst, and the Dutch company Organon they control 80 per cent of the supplies. The stakes are high, and the multinationals, already annoyed at the establishment of the People's Health Centre, which now manufactures six basic drugs including ampicillin and paracetamol, are running newspaper advertisements giving warning that an assault on their profits might rebound on the Bangladeshis in the form of reduced research and development. What concerns the multinationals most of all is that the Bangladesh idea will catch on, as both War on Want and Health Action International hope it will. The stakes world wide are enormous: developing countries consume £15 thousand millions' worth of drugs a year. The UK alone sold £250 millions' worth of drugs to developing countries in 1980. The fact that WHO has narrowed the number of essential drugs down to 250 suggests that the vast majority of that money is spent on drugs of questionable value.

Lead pipe warning 'ignored by authorities', Andrew Veitch, *The Guardian*.

Water authorities and experts at the Department of the Environment were warned eight years ago about the dangers of lead in the joints of copper water

pipes. Scientists reported in 1974 and in 1977 that cheap lead-based solder was polluting drinking water and should be banned. But the warnings were ignored, it was claimed, because Government officials feared that thousands of house-holders would demand that their water pipes should be replaced. Instead, the Department of the Environment commissioned a private report from the Water Research Centre which confirmed the hazard, and called for a ban on lead-based solder. But, as *The Guardian* reported recently, the department does not plan to publish the document or implement its recommendations. The first warning came from Dr. Tony Waldron, now senior lecturer in occupational medicine at the London School of Hygiene. He found that the combination of lead, copper, and soft acidic water produced a galvanic reaction: it worked like a car battery and the lead dissolved into the water. He said: "The Department of the Environment was certainly aware of the problem. But it would have been too expensive to replace the pipes. That has been the cause of the inaction." The second warning came from Dr. David Lyon and Dr. John Lenihan, of the Glasgow Health Board's clinical physics department, on a survey published in the *British Corrosion Journal*, and circulated to members of the health authority and water board. They analysed 216 water samples from copper pipes with lead-soldered joints and found that 14 per cent were above the safety limit of 50 microgrammes per litre.

Now alert over lead in blood, David Beake, *The Sunday Times*, 4th July 1982.

Whitehall is to lower significantly the level at which lead in the bloodstream is expected to give doctors cause for concern. But the decision has been questioned by campaigners for lead-free petrol who want tougher action. The present threshold for "further examination" of those exposed to lead is 35 microgrammes per 100ml of blood. Doctors will shortly be told to examine in depth any patient with a blood lead in excess of 25 microgrammes per 100ml. The revised thresholds are contained in a joint Department of the Environment and Department of Health guidance document. They reflect growing concern within the government about exposure to lead in terms of the current danger thresholds.

Debendox hazard warning — but not in Britain, Elaine Potter, *The Sunday Times*, 4th July 1982.

A new warning about Debendox, the anti-nauseant drug, taken by expectant mothers, is to be circulated in America after two recently completed animal studies suggested that it could damage the unborn foetus. The Food and Drug Administration (FDA) and the drug's manufacturers, Merrell Dow Pharmaceuticals (who market Debendox as Bendectin in America), are expected to agree on a new direction slip giving details of the studies. One, conducted on rats by Professor Reimer Roll for the West German health ministry, suggested a possible link between Debendox and diaphragmatic hernia — a hole in the baby's diaphragm which allows the intestine to enter

the chest. A spokesman for Dow Chemicals said the company did not consider the findings to be very relevant, especially as the researchers had used 375 times the human dose. The second study, carried out on monkeys in California suggested a possible link between Debendox and the development of a heart defect. Dr. Andrew Hendrix, who conducted this study, said: "This defect has not been observed in any of the animals in other drug studies." The Food and Drugs Administration said the labelling changes would reflect the fact that the monkey studies were conducted without using a control group of untreated animals and, like the rat studies, are being repeated. The Committee on Safety of Medicines in Britain is aware of the proposed labelling changes in America but neither it nor the company proposes to take any action here. The committee feels that the studies do not provide scientifically acceptable evidence that the drug does cause damage. Debendox has come in for considerable adverse publicity since a lawsuit brought against the manufacturers in Florida in 1980 alleging that it had damaged a child whose mother had taken it in pregnancy. The number of prescriptions in Britain last year fell by 25 per cent — from 147,000 to 110,000 matching the decline in America. This figure can still be considered high in view of the controversy and the fact that the British data sheet was changed last year, advising doctors that the use of any drug during early pregnancy "should be avoided if at all possible."

Warning after poisoning of salmon, *The Times*, 2nd August 1982.

People in the Lake District were given a warning not to buy fish from unusual sources after the poisoning of sea trout and Salmon in the river Kent, near Kendal. Police and water authority officials were investigating the deaths of a large number of migratory fish at Sedgwick. Cumbria police said: "It is apparent that some toxic element was put into the river which caused these deaths. It may or may not render the fish unfit to eat."

Weed Killer Gas put 27 in hospital, *The Telegraph*, 17th July 1982.

The gas from a canister found in Tivoli Park recreation ground Margate, which put 27 people in hospital, was named as a weedkiller which causes serious symptoms if it is inhaled or touches the skin. Major John Thomas, the County Council's public protection committee chairman, named the weed-killer as Metasystox 55, an ICI product, said: "The victims collapsed with sweating, nausea, headaches, stomach pains, fainting spells and loss of muscle control. They were rescued by firemen who wore breathing apparatus and protective clothing." The 27, including 14 children, seven firemen, four policemen and two tennis players, collapsed after inhaling fumes.

Americans are dying of the good life, Michael Hamlyn, *The Times*, 9th July 1982.

A report from America's National Institute of

Medicine, part of the National Academy of Sciences, declares that it is our "life-style" that is killing us. "As much as 50 per cent of mortality from the 10 leading causes of death in the United States can be traced to life-style", says the report. It adds for good measure that three quarters of Americans die from heart disease, stroke, cancer, accidents or violence, in all of which behaviour plays a part. Its list of risky behaviour includes cigarette smoking, excessive drinking, use of illicit drugs, certain dietary habits, reckless driving, not sticking to prescribed medicines, and "maladaptive responses to social pressures". Among particular dangers mentioned in the report are smoking and drinking. 320,000 deaths a year are blamed by the United States Surgeon-General on smoking. One-third of Americans over the age of 19 smoke. The mortality rate of alcoholics is 2.5 times higher than average. An estimated 134 million adults abuse alcohol, and up to 200,000 a year die from related illnesses, accidents and violence.

Drug test restraints 'should be eased', Andrew Veitch, *The Guardian*, 30th June 1982.

Doctors should be allowed to test new drugs on patients suffering from certain fatal illnesses without asking for their written consent, according to two leading researchers. Instead of warning patients — young leukaemia victims, for example — that the drug they are to be given as part of an experiment might make them worse, they should be told that they are to be given "the best treatment for their condition," argues Dr. Peter Lewis, a senior lecturer at the Royal Postgraduate Medical School, Hammersmith, in the *Journal of Medical Ethics*. Professor David Weatherall, professor of clinical medicine at Oxford University, points out in the same issue that to ask a patient suffering from a heart attack for his informed consent when he is drugged, drowsy, and in severe pain, is "intellectually dishonest . . . nonsense." Many research centres may have already dispensed with consent, written or verbal, according to the journal's leading article. But it adds that if a doctor accepts — as the Declaration of Helsinki enjoins — that "concern for the interests of the subject must always prevail over the interests of science and society," he must not instigate medical test without a patient's informed consent. In May *The Lancet* reported that Professor Hugh Dudley of St. Mary's Hospital, London, had involved 250 patients in trials of a new cancer drug without asking for their consent. It also referred to Mrs. Margaret Wigley, aged 84, who died earlier this year of pneumonia caused by a drug which she was given as part of a clinical trial she had not been told about. The Birmingham coroner's verdict was death by misadventure. The *Lancet's* legal correspondent, Ms. Diana Brahm, argued that conducting medical trials on patients without their knowledge was unacceptable.

MP tells of 'secret list of danger factories', Pearce Wright, *The Times*, 8th July 1982.

A secret list of 497 industrial sites that constitute

major hazards is maintained by the Health and Safety Executive, Sir Bernard Braine, Conservative MP for South-east Essex, has alleged in evidence to a Commons select committee. He says there is no means whereby the public can learn whether they are in special danger or not. Moreover, he asserts that an industrial company can change a process from one that is relatively harmless to one that is hazardous without obtaining planning permission. It can also change the scale of its operations without planning permission, although that may mean an increase in risks. Sir Bernard said it must be changed, so that the development of hazardous industrial plant, storage depots or transport is not permitted without taking into account the impact on the environment, the question of sabotage and the arrangements for evacuation of the population.

Wildlife

Drainage plan likely to go ahead, David Nicholson-Lord, *The Times*, 2nd August 1982.

A controversial wetland drainage scheme in the Midlands is expected to proceed in spite of a water authority's refusal to disclose the economic case for it. One of the strongest objectors, the Royal Society for the Protection of Birds (RSPB), criticized the basis for the scheme as a "national scandal". Implementation of the Severn-Trent authority's £6.4m flood prevention scheme for about twenty miles along the river Soar, near Leicester, has been made likelier by the Nature Council's decision to drop its objections. The council said it was satisfied by improved plans to landscape the area and safeguard sites of special scientific interest. But the Severn-Trent proposals, which initially aroused strong opposition from Conservative MPs and the county council, have failed to satisfy the RSPB, which describes the thinking behind the scheme as dubious and "extremely unsatisfactory". Although the Soar proposal includes flood protection for some small villages and roads, its main component, according to the RSPB, is the draining of almost 7,000 acres of farmland so they can be used for intensive crop growing instead of summer grazing. But studies have cast growing doubts on the assumptions behind the analyses which the authority refuses to disclose. The faults are said to include over-optimistic estimates by farmers of crop yields and productivity; ignoring quota systems in areas like sugar and potatoes, and dealing only in "farmgate" prices. The latter is claimed to be a crucial flaw because a large proportion of prices paid to farmers under the common agricultural policy is effectively public subsidy. Mr. Gwyn Williams, an RSPB planner, said yesterday: "It is a national scandal. There is no other word to describe how so much taxpayers' money is being wasted."